

# **16x 3GSDI Extender Racktray**

**GEF-3GSDI-16X**

**User Manual**

**[www.gefenpro.com](http://www.gefenpro.com)**



## ASKING FOR ASSISTANCE

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### Notice

Gefen, LLC reserves the right to make changes in the hardware, packaging, and any accompanying documentation without prior written notice.

**16x 3GSDI Extender Racktray** is a trademark of Gefen LLC

# CONTENTS

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1	Introduction
2	Operation Notes
3	Features
4	Panel Layout
4	Front Panel
5	Back Panel
6	Panel Descriptions
7	Connecting the 16x 3GSDI Extender Racktray
13	Wiring Diagram
14	Specifications
15	Warranty

# INTRODUCTION

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Congratulations on your purchase of the GefenPRO 16x16 DVI Matrix with Front Panel Push Button Control. Your complete satisfaction is very important to us.

## **GefenPRO**

In the realm of video distribution, certain features are invaluable in a commercial or broadcast environment. Accommodations such as a build-in power supply and flat black rack-mount enclosures set GefenPRO apart from our traditional products. Complex distribution units allow for professional DVI, 3G-SDI, and HDMI signals to be routed and converted easily and seamlessly, while being backed up by a renowned and dependable technical support team. Gefen invites you to explore the GefenPRO product line and hopes that you find the solution that fits your needs.

## **The GefenPRO 16x 3GSDI Extender Racktray**

The GefenPRO 16x 3GSDI Extender Racktray is a companion product to the GefenPRO 16x16 3GSDI Matrix (not Included) and is the perfect solution for mounting 3GSDI fiber optic extenders into a single rack (1U) space. The power connector on each Extender connects to a central power bus on the rack tray. Dual redundant 12 V DC power supplies provide enough power to connect up to 16 individual fiber optic extenders. The modular rack tray conforms to the EIA-310 standard and will fit in a standard 1U rack space.

## **How It Works**

Unscrew and remove the clamping bracket from the top of the unit. Remove the protective cover from the fiber optic connector on the extender. Attach the appropriate ST-terminated fiber optic cable from the rack unit to the fiber connector on the extender unit. Gently push and turn the ring of the connector until it locks securely around the fiber optic connector of the unit. Connect the power supplies to the power receptacles on the rear of the unit (For full redundancy, the power supplies should be plugged into separate electrical circuits). Use the included male-to-male BNC adapter and attach it to the BNC connector of the fiber optic extender. When attaching the BNC adapter, make sure that the hex screw is positioned outside of the U-shaped slot on the front of the rack tray. Using the supplied wrench, tighten the hex screw to secure the fiber optic extender in place. Perform the same procedure for the remaining fiber optic extender units. After the fiber optic extenders are installed in the rack tray, replace the clamping bracket on the top of the unit. Mount the 16x Extender Rack Tray in the equipment rack, and connect the 3GSDI and fiber optic cables to the back of the rack tray.

## OPERATION NOTES

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### READ THESE NOTES BEFORE INSTALLING OR OPERATING THE GEFENPRO 16X 3GSDI EXTENDER RACKTRAY



**WARNING:** The internal Power Supply is intended to power only Gefen devices that require 12V DC, and have a total power draw of less than 6 Amps. Using this power supply to power other devices will void the warranty and may damage the devices, the power supply, or both.

# FEATURES

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## Features

- Modular design that can accommodate up to sixteen 3GSDI fiber optic extenders (Gefen part no. GEF-3GSDI-FO-141)
- Single 12V power bus with redundant power supplies providing power to all 16 mounting brackets
- Power failure LED indicators

## Package Includes

- (1) 16x 3GSDI Extender Racktray
- (16) BNC Adapters
- (1) BNC Wrench
- (2) 12V DC Power Supplies
- (1) Quick Start Guide

# PANEL LAYOUT

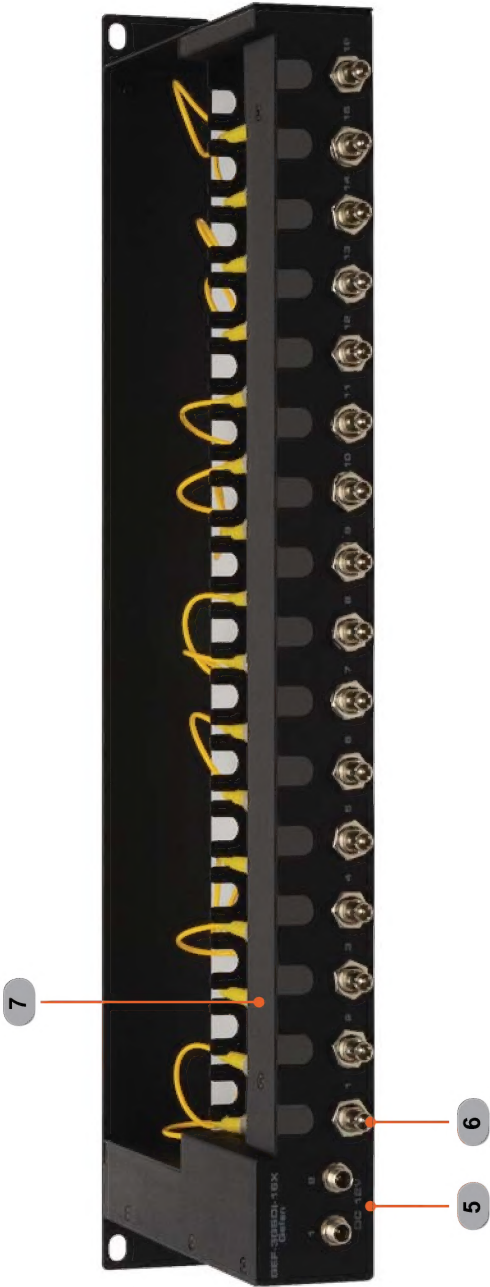
Front Panel





PANEL LAYOUT

Back Panel



## PANEL DESCRIPTIONS

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### Front Panel

- 1 3GSDI Power Receptacle**  
Connect the power supply connector from the 3GSDI Fiber Optic Extender Sender unit to this power receptacle
- 2 ST Fiber Connector**  
Connect the ST Fiber Connector to the ST Fiber Connector Output on the Sender unit.
- 3 U-Bracket**  
Holds the each 3GSDI Fiber Optic Extender Sender unit in place. See the installation instructions on the next page.
- 4 Power Indicators**  
These two LED indicators will glow bright blue when both of the included 12V DC power supplies are connected.

### Back Panel

- 5 12V DC**  
Connect the included 12V DC power supplies to each of these power receptacles.
- 6 ST Fiber Connector**  
Connect an ST-terminated fiber optic cable from this connector to the 3GSDI Fiber Optic Extender Receiver unit.
- 7 Clamping Bracket**  
Secures the 3GSDI Fiber Optic Extender Sender units in position.

## CONNECTING THE 16X 3GSDI EXTENDER RACKTRAY

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### How to Connect the 16x 3GSDI Extender Racktray

1. Unscrew and remove the clamping bracket using a Philips screwdriver.



2. Remove the protective cover from the yellow fiber optic cable.



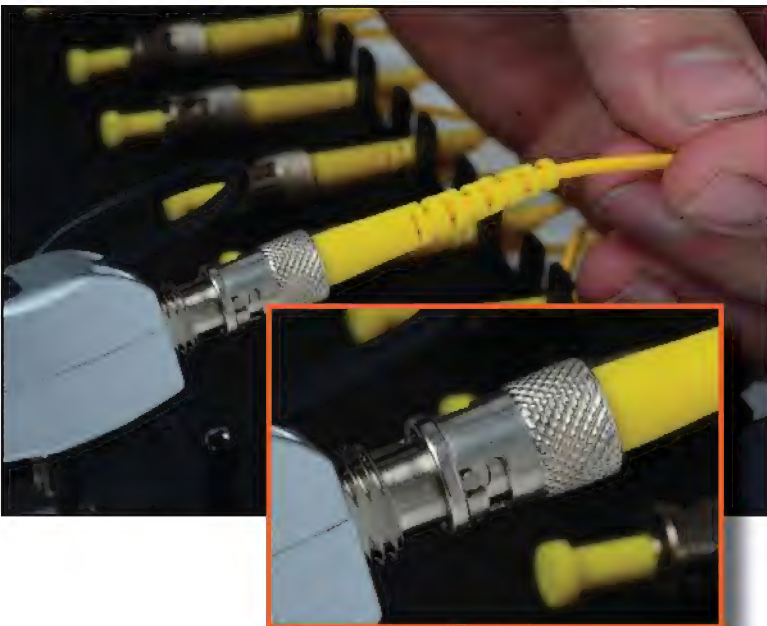
## CONNECTING THE 16X 3GSDI EXTENDER RACKTRAY

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3. Connect the yellow fiber optic cable to the output connector of the 3GSDI Fiber Optic Extender Sender unit.

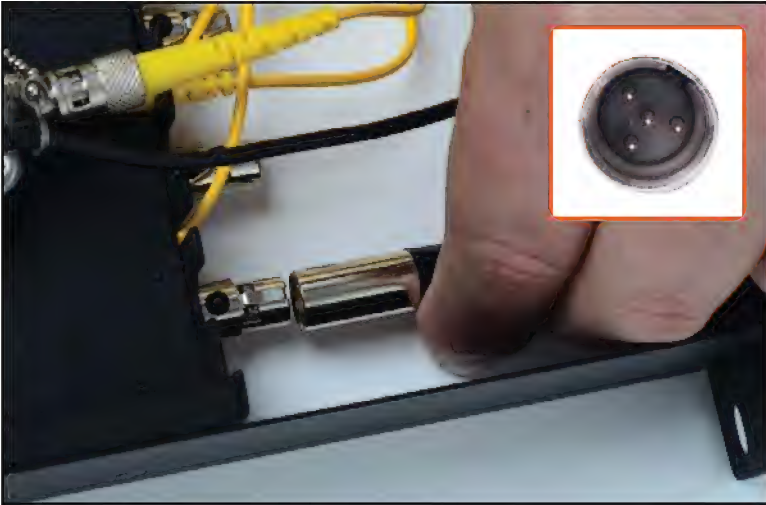


4. Gently push and turn the ring of the connector until it locks securely around the output connector of the Sender unit (see photo inset).



## CONNECTING THE 16X 3GSDI EXTENDER RACKTRAY

5. Connect the power supply cable on the Sender unit to the power receptacle on the inside of the racktray. Note the pin configuration on the power supply for the 3GSDI Fiber Optic Extender (see photo inset).



**NOTE:** To disconnect the power supply cable on the Sender unit from the power receptacle, press and hold the black push-button on top of the power receptacle, while removing the power supply cable from the power receptacle.





## CONNECTING THE 16X 3GSDI EXTENDER RACKTRAY

6. Use one of the included male-to-male BNC adapters and attach it to the BNC input connector of the Sender unit. Note that one end of the BNC adapter is shorter than the other. Make sure that the short end is inserted in the input on the Sender unit, as shown below. Make sure that the BNC adapter locks into place (see photo inset).



7. Place the 3GSDI Fiber Optic Extender Sender unit into the racktray. Rotate the BNC connector, if necessary, so that the connector fits inside the U-bracket and the Sender unit lays flat inside the racktray.



## CONNECTING THE 16X 3GSDI EXTENDER RACKTRAY

8. Use one of the included lock washers and place it over the BNC connector.



**NOTE:** When attaching the BNC connectors to the racktray, make sure to use the lock washers and hex nuts in the clear plastic bag, not the gray plastic bag.



9. Place a hex nut over the lock washer and tighten the BNC hex nut using the included BNC hex wrench. Do not overtighten the BNC nut.



## CONNECTING THE 16X 3GSDI EXTENDER RACKTRAY

10. Repeat steps 2 - 9 for each Sender unit.
11. After all Sender units have been installed, replace the clamping bracket
12. Mount the 16x 3GSDI Extender Racktray in an equipment rack.
13. Connect a 3GSDI cable between the 3GSDI source and each Sender unit (blue cable).
14. Remove the protective cover from the ST fiber connector and connect an ST-terminated fiber optic cable (orange cable) from the ST fiber optic connector on the racktray to the 3GSDI Fiber Optic Extender Receiver unit.



15. Connect the two 12V DC power supplies (included) to the 16x 3GSDI Extender Racktray.
16. Connect the included AC power cords between each power supply and a separate electrical outlet.

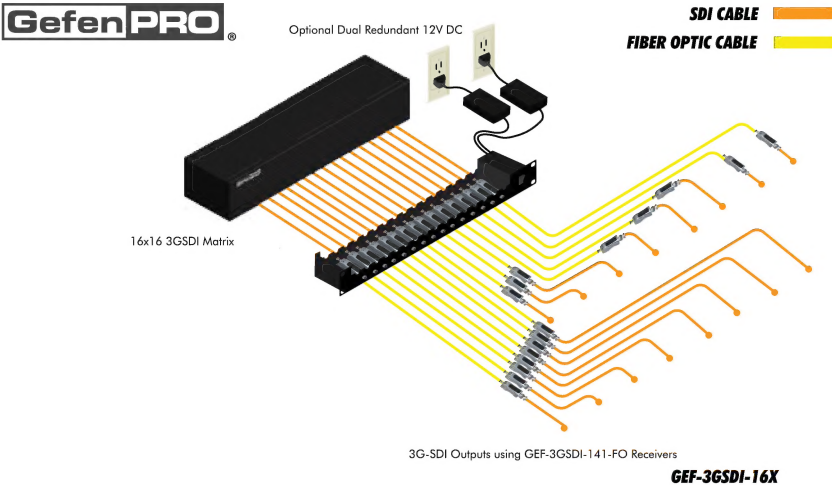


**NOTE:** It is recommended that each power supply be connected to separate outlets on different circuits to provide the best redundancy in the event of a brownout or blackout.



# CONNECTING THE 16X 3GSDI EXTENDER RACKTRAY

## Wiring Diagram for the 16x 3GSDI Extender Racktray



# SPECIFICATIONS

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Power Supplies..... (2) 12V / 6.67A DC power supplies  
(second provided power supply optional for redundancy)

Dimensions (W x D x H).....19" x 6.8" x 1.75"  
(482mm x 172mm x 44mm)

Shipping Weight.....4 lbs.

## WARRANTY

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Gefen warrants the equipment it manufactures to be free from defects in material and workmanship.

If equipment fails because of such defects and Gefen is notified within two (2) years from the date of shipment, Gefen will, at its option, repair or replace the equipment, provided that the equipment has not been subjected to mechanical, electrical, or other abuse or modifications. Equipment that fails under conditions other than those covered will be repaired at the current price of parts and labor in effect at the time of repair. Such repairs are warranted for ninety (90) days from the day of reshipment to the Buyer.

This warranty is in lieu of all other warranties expressed or implied, including without limitation, any implied warranty or merchantability or fitness for any particular purpose, all of which are expressly disclaimed.

1. Proof of sale may be required in order to claim warranty.
2. Customers outside the US are responsible for shipping charges to and from Gefen.
3. Copper cables are limited to a 30 day warranty and cables must be in their original condition.

The information in this manual has been carefully checked and is believed to be accurate. However, Gefen assumes no responsibility for any inaccuracies that may be contained in this manual. In no event will Gefen be liable for direct, indirect, special, incidental, or consequential damages resulting from any defect or omission in this manual, even if advised of the possibility of such damages. The technical information contained herein regarding the features and specifications is subject to change without notice.

For the latest warranty coverage information, refer to the Warranty and Return Policy under the Support section of the Gefen Web site at [www.gefen.com](http://www.gefen.com).

## PRODUCT REGISTRATION

**Please register your product online by visiting the Register Product page under the Support section of the Gefen Web site.**



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This product uses UL or CE listed power supplies.